

A New *Euphorbia*-Associated *Plagithmysus* from Maui (Coleoptera: Cerambycidae)

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ABSTRACT

An *Euphorbia*-associated species of *Plagithmysus* of the subgenus *Neoclytarus* from Maui Island is described as new. It is the fourth member of this subgenus of native Hawaiian longicorn beetles to be associated with *Euphorbia*. The new species is characterized, illustrated, and compared to close relatives.

The first *Euphorbia*-associated plagithmysine from the island of Maui was reared by A.C. Medeiros. We take pleasure in dedicating this new species to Mr. Medeiros of Haleakala National Park. The type specimens are deposited in Bishop Museum, Honolulu (BPBM).

Plagithmysus (Neoclytarus) medeirosi new species

Fig. 1

♂. Dorsum bicolorous, derm largely piceous overlayed with various patterns of pale pubescence. Head piceous; antenna pitchy fuscous with bases of scape and segments 3–6 and entire pedicel paler clearer fuscous; pronotum and scutellum piceous; elytron mostly piceous but humerus fuscescent and extreme lateral margin testaceous; ventral surfaces fuscous; legs yellow-testaceous to piceous, with coxae, petioles of femora and extreme base of protibia pale. Frons, gena, and anterior part of vertex subdensely clothed with pale; gena with small dark patches of derm exposed; antenna with scape submoderately clothed with pale, pedicel and segment 3 with a few pale recumbent hairs basally, segments 3–4 with slender setae exceeding diameter of respective segment, segments 5–11 with setae shorter and sparser; prothorax with disc more or less glabrous, basal tubercle with a few white hairs posteriorly; anterior area with whitish hairs sublaterally; basal area submoderately clothed with pale across middle; sublateral region with dark adpressed hairs bordering glabrous discal area; pleural area subdensely clothed with pale but with 2 small glabrous shining piceous areas at and before middle; pleuron with pale erect setae; scutellum with a few pale hairs; elytron subevenly clothed with pale recumbent hairs contrasted with glabrous areas as follows: dark region at basal $\frac{1}{3}$ and a dark transverse band just behind middle; basal region with pale pubescence as follows: along base, in postscutellar depression, depression mesad of humerus, and at side basally and postbasally; apical pale area with irregular dark markings of derm exposed; venter moderately clothed with erect and suberect pale setae; femora and tibiae with erect setae; meso- and metafemur with setae on petiole exceeding diameter of petiole and recumbent white hairs on club unevenly arranged with dark band of derm exposed. Body length 10.4 mm; breadth 2.55 mm.

Head: Frons broader than deep, breadth slightly exceeding 2 eye-widths in frontal view, surface with dark shining narrowly glabrous median line on upper $\frac{4}{5}$ continued above as sulcus between antennal tubercles; eye about $1.17 \times$ as deep as

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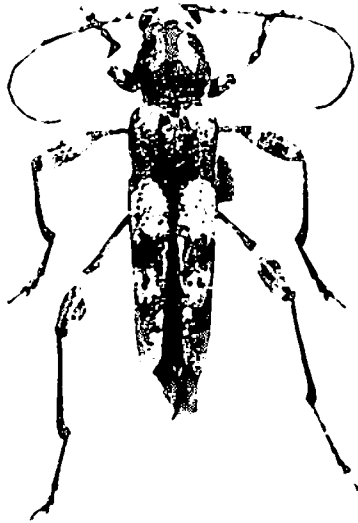


FIGURE 1. *Plagihmysus (Neoclytus) medeirosi*, n. sp., dorsal view of holotype ♂.

gena; lower eye-lobe occupying about $\frac{3}{4}$ of eye-depth as viewed along eye-genal angle axis; vertex with large punctures below and smaller ones above, dull granulate above. *Antenna*: About $\frac{3}{4}$ as long as body; relative lengths of segments as follows (in 1/100ths of mm): 100:32:104:108:104:76:64:52:52:44:56. *Prothorax*: Just as long as broad, broadest slightly behind middle; side moderately convex along middle, less convex anteriorly and posteriorly; disc granulate-punctate, punctures close, 3–4 × as large as interspaces; discal tubercles transverse slightly raised carinae extending only a short distance ($<1/5$ pronotal breadth); anterior and median tubercles subequal, basal tubercle smaller; surface between anterior and median tubercles moderately asperate and area behind basal tubercle also asperate; surface broadly swollen sublaterally at basal 0.3 and more briefly swollen along discal margin. *Scutellum*: Punctulate; apical margin convex. *Elytron*: About 5.85 × as long as broad, broadest at base; side rather evenly narrowed to preapex, apex obtusely angulate; humerus moderately raised, with area mesad of humerus briefly depressed; postscutellar area depressed; discal surface closely punctate, punctures commonly 2–3 × as large as interspaces; interspaces shining alucateous; disc with a faint longitudinal carina extending from middle to preapex. *Ventral surfaces*: Mesosternum densely asperate-punctate; abdomen finely granulate but shining and submoderately asperate-punctate. *Legs*: Lengths of metafemur, -tibia, -tarsus are (in 1/100ths of mm): 244:232:136; basitarsus about 0.55 × as long as tarsus; metafemur with basal 0.4 pedunculate, apical 0.6 clavate, club somewhat flattened, ovate in x-section and about $1/6$ as broad as length of femur.

♀. Coloration and pubescence as in male. Chiefly differing from male in sexual characters: Antenna with apical 3 segments distinctly shorter and more flattened; abdomen V less narrowed apically, sternum VI protruding, apex truncate; meta-

femur with club relatively short (basal 0.6 pedunculate, apical 0.4 clavate), more gradually thickened, and more slender (about 1/12 as broad as length of femur). Body length about 9.55 mm; breadth 2.4.

Holotype ♂ (BPBM 13,540), HAWAIIAN IS: MAUI I: Auwahi, S slope of Haleakala, ca. 1220 m elevation, ex 13 cm diameter trunk section of *Euphorbia celastroides muiensis* collected early Feb. 1986 by R. Hobdy; emerged 24–25.Feb.1986, A.C. Medeiros collector; allotype ♀ (BPBM), same data as holotype, except specimen emerged on 19.Feb.1986.

Remarks. Five plagithmysines are now associated with *Euphorbia*. *Plagithmysus* (s. str.) *nihoa* Perkins is the only member of the nominate subgenus associated with *Euphorbia*; it is also the only plagithmysine known from Nihoa Island. The remaining four are of the subgenus *Neoclytarlus*, with each on a different island: *akoko* G.&D. on Kauai, *euphorbiae* Bridwell on Oahu, *medeirosi*, n. sp. on (E) Maui, and *montgomeryi* on Hawaii. This *Neoclytarlus* assemblage may represent more than one shift to *Euphorbia* from ancestral stock, as *medeirosi*, n. sp. and *montgomeryi* appear to belong to a different species complex than *akoko* or *euphorbiae*. Selected characters of the four *Euphorbia*-associated species of *Neoclytarlus* are compared in Table 1. The are graded as follows: 1. Lower eye-lobe (LEL) with depth subequal to depth of gena = +; LEL shorter than gena = -; 2. Interocular space (IOS) with breadth slightly exceeding 0.5 of head breadth = +; IOS subequal to or narrower than 0.5 of head breadth = -; 3. Pronotal tubercles (PNT) all present = +; PNT not all present, basal tubercle missing = -; 4. Pronotal tubercle bases (PNTB) distinctly raised above contour of disc = +; PNTB barely raised = -; 5. Pronotal disc (PND) pubescent = +; PND glabrous = -; 6. Prothorax (PTX) with dark pleural markings elongate or double = +; PTX with markings absent or short when single = -; 7. Elytron (EL) relatively slender, with length exceeding 5.5 length/breadth = +; EL relatively robust, with length at or less than 5.5 length/breadth = -; 8. Femoral petiole hairs (FMPH) nearly 2 × as long as diameter of petiole = +; FMPH at about 1.25 × as long as diameter of petiole = -; 9. Body length (BL) at or exceeding 9.5 mm = +; BL less than 9.5 mm = -.

TABLE 1. Selected characters are listed for the four species of the subgenus *Neoclytarlus* associated with *Euphorbia*. Characters are explained in text.

Characters	<i>akoko</i>	<i>euphorbiae</i>	<i>medeirosi</i> n. sp.	<i>montgomeryi</i>
1. LEL	+	-	-	-
2. IOS	-	-	+	-
3. PNT	-	+	+	+
4. PNTB	+	+	-	+
5. PND	+	+	-	+
6. PTX	-	-	+	+
7. EL	-	-	+	+
8. FMPH	-	-	+	+
9. BL	-	-	+	+

In the key to plagithmysines (Gressitt & Davis, 1969),³ all the *Euphorbia*-associated *Neoclytus* run to Couplet 92. From there, the two groups of species are separated on the basis of hair length on the femoral petioles, with *akoko* and *euphorbiae* running to Couplet 93 (hair length only slightly longer than diameter of petiole) and *medeirosi*, n. sp. and *montgomeryi* running to Couplet 103 and beyond (hair length about $2 \times$ as long as diameter of petiole). The new species keys to the vicinity of *wattleae* G.&D. (Couplet 105) but differs from the latter by having the pronotal tubercles not placed on discal swellings, pronotal disc glabrous, and dark glabrous bands on elytron.

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